A. INTRODUCTION

As noted in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, increased concentrations of greenhouse gases (GHGs) are changing the global climate, resulting in wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. Through PlaNYC, New York City's long-term sustainability program, continued and enhanced in OneNYC, the City advances sustainability initiatives and goals to both greatly reduce GHG emissions and increase the City's resilience to climate change. The goal to reduce citywide GHG emissions to 30 percent below 2005 levels by 2030 was codified by Local Law 22 of 2008, known as the New York City Climate Protection Act (the "GHG reduction goal"). This goal was developed for the purpose of planning for an increase in population of almost one million residents while achieving significant GHG reductions. Subsequently, the City committed to an 80 percent reduction in GHGs in by the year 2050 ("80 by 50"). On November 13, 2014, the City Council passed a bill to reduce citywide GHG emissions by 80 percent by 2050, and it was adopted on December 14, 2014 (Local Law 66 of 2014).

The contribution of a proposed project's GHG emissions to global GHG emissions is likely to be considered insignificant when measured against the scale and magnitude of global climate change. However, certain projects' contribution of GHG emissions still should be analyzed to determine their consistency with the City's GHG reduction goal, which is currently the most appropriate standard by which to analyze a project under CEQR. The GHG consistency assessment focuses on those projects that have the greatest potential to produce GHG emissions and evaluates their potential to result in significant inconsistencies with the GHG reduction goal. The *CEQR Technical Manual* recommends that a GHG consistency assessment be conducted for any project resulting in 350,000 square feet (sf) or more of development, and other energy-intense projects.

As described in Chapter 1, "Project Description," the reasonable worst case development scenario (RWCDS) With-Action condition for the proposed action consists of approximately 1,147,378 gsf of residential space consisting of 1,147 dwelling units (DUs), of which approximately 344 DUs would be affordable housing DUs (30 percent of the total); 64,807 gross square feet (gsf) of local retail space; approximately 128,128 gsf of parking space, consisting of 427 spaces, as required by zoning; and approximately 26,000 sf of publicly-accessible open space. Therefore, a GHG consistency assessment is warranted. GHG emissions that would be generated as a result of the RWCDS/Future With-Action condition are presented in this chapter, along with an assessment of the its consistency with the citywide GHG reduction goal.

In addition, since the project area is partially located within the 500-year floodplain, the potential effects of global climate change under RWCDS/With-Action conditions have been considered.

B. PRINCIPAL CONCLUSIONS

The proposed action would not result in significant adverse impacts related to greenhouse gas emissions and climate change. It is estimated that the proposed action/RWCDS would generate approximately 11,842 total metric tons of carbon dioxide equivalent (CO_2e) emissions annually, including approximately 8,478 metric tons of CO_2e emissions from building operations and 3,364 metric tons of CO_2e emissions from mobile sources. This represents less than 0.03 percent of the City's overall 2014 GHG emissions of approximately 49.09 million metric tons. It should also be noted that the estimated GHG emissions conservatively do not account for any energy efficiency measures that may be implemented beyond what is required by City's Energy Code. Accordingly, the proposed action would not result in significant adverse GHG emissions impacts.

C. BACKGROUND

Recognized Greenhouse Gases

GHGs are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. This property causes the general warming of the Earth's atmosphere, or the "greenhouse effect." Some GHGs, such as carbon dioxide (CO_2), occur naturally and are emitted into the atmosphere through natural processes and human activities. The principal GHGs emitted as a result of human activities are described below.

Carbon Dioxide (CO_2)

CO_2 enters the atmosphere via the combustion of fossil fuels (oil, natural gas, and coal), solid waste, trees, and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement). CO_2 is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. Although not the GHG with the strongest effect per molecule, CO_2 is by far the most abundant and, therefore, the most influential GHG.

Methane (CH_4)

Methane (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, as well as through the decay of organic waste in municipal solid waste landfills. Methane, in addition to nitrous oxide (noted below), play an important role in GHG emissions, since the removal processes for these compounds are limited and they have a relatively high impact on global climate change, as compared to an equal quantity of CO_2.

Nitrous Oxide (N_2O)

Nitrous oxide (N_2O) is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste.

Fluorinated Gases

Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are powerful synthetic GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs], and halons). These gases are typically emitted in smaller quantities. However, because they are potent GHGs, they are sometimes referred to as High Global Warming Potential gases (High GWP gases).

The *CEQR Technical Manual* lists six GHGs that could potentially be included in the scope of an Environmental Impact Statement (EIS): CO_2, N_2O, methane, HFCs, PFCs, and SF_6. This analysis focused on CO_2, N_2O, and methane, as there are no significant direct or indirect sources of HFCs, PFCs, or SF_6 associated with the RWCDS.

GHGs differ in their ability to trap heat. To compare emissions of GHGs, compilers use a weighting factor called a GWP, where the heat-trapping ability of one metric ton (1,000 kilograms (kg)) of CO_2 is taken as the standard, and emissions are expressed in terms of CO_2e, but can also be expressed in terms of carbon equivalents. The GWPs for the main GHGs are presented in Table 14-1.

Table 14-1, Global Warming Potential (GWP) for Primary Greenhouse Gases

Greenhouse Gas	Common sources	GWP
CO_2 - Carbon Dioxide	Fossil fuel combustion, forest clearing, cement production	1
CH_4 - Methane	Landfills, production and distribution of natural gas and petroleum, anaerobic digestion, rice cultivation, fossil fuel combustion	21
N_2O - Nitrous Oxide	Fossil fuel combustion, fertilizers, nylon production, manure	310
HFCs - Hydrofluorocarbons	Refrigeration gases, aluminum smelting, semiconductor manufacturing	140-11,700*
PFCs - Perfluorocarbons	Aluminum production, semiconductor manufacturing	6,500-9,200*
SF_6 - Sulfur Hexafluoride	Electrical transmissions and distribution systems, circuit breakers, magnesium production	23,900

Notes:
Since the Second Assessment Report (SAR) was published in 1995, the International Panel on Climate Change (IPCC) has published updated GWP values in its Third Assessment Report (TAR) and Fourth Assessment Report (AR4) that reflect new information on atmospheric lifetimes of greenhouse gases and an improved calculation of the radiative forcing of CO_2. However, GWP values from the SAR are still used by international convention to maintain consistency in GHG reporting, including by the United States when reporting under the United Nations Framework Convention on Climate Change.
* The GWPs of HFCs and PFCs vary depending on the specific compound emitted. A full list of these GWPs is available in Table ES-1 of the U.S. Environmental Protection Agency's Inventory of Greenhouse Gas Emissions and Sinks: 1990-2008, available at: http://epa.gov/climatechange/emissions/usinventoryreport.html.

Climate Change

Climate change is expected to result in increasing temperatures, changes in precipitation patterns, rising sea levels, and more intense and frequent extreme weather events, such as heavy downpours, heat waves, droughts, and high winds. As discussed in Chapter 2, "Land Use, Zoning, and Public Policy," the New York City Panel on Climate Change (NPCC) projects that by the 2050s sea levels could be between 11 and 24 inches higher than they are today; the NPCC's high estimate for sea level rise is 31 inches by the 2050s. In addition, coastal flood and storms are projected to occur more frequently with higher associated storm surges. Table 14-2 summarizes projected changes in air temperature, precipitation, and sea level rise published by the NPCC in its 2013 Climate Risk Information Report.

Table 14-2, NPCC Baseline Climate and Mean Annual Changes

Air Temperature Baseline (1971-2000) 54˚F	**Low-Estimate (10th Percentile)**	**Middle Range (25th to 75th Percentile)**	**High-Estimate (90th Percentile)**
2020s	+ 1.5˚F	+ 2.0 to 3.0˚F	+ 3.0˚F
2050s	+ 3.0˚F	+ 4.0 to 5.5˚F	+ 6.5˚F
Precipitation Baseline (1971-2000) 50.1 inches	**Low-Estimate (10th Percentile)**	**Middle Range (25th to 75th Percentile)**	**High-Estimate (90th Percentile)**
2020s	- 1 percent	0 to 10 percent	+ 10 percent
2050s	1 percent	+ 5 to + 10 percent	+ 15 percent
Sea Level Rise Baseline (1971-2000) 0 inches	**Low-Estimate (10th Percentile)**	**Middle Range (25th to 75th Percentile)**	**High-Estimate (90th Percentile)**
2020s	2 inches	4 to 8 inches	11 inches
2050s	7 inches	11 to 24 inches	31 inches

Source: NPCC Climate Risk Information 2013; Observations, Climate Change Projections, and Maps.
Based on 35 GCMs (24 for sea level rise) and two Representative Concentration Pathways. Baseline data are from the National Oceanic and Atmospheric Administration (NOAA) National Climate Data Center (NCDC) United States Historical Climatology Network (USHCN), Version 2 (Menne et al., 2009). Shown are the 10th percentile, 25th percentile, 75th percentile, and 90th percentile 30-year mean values form model-based outcomes. Temperature values are rounded to the neared 0.5˚F, precipitation values are rounded to the nearest five percent, and sea level rise values are rounded to the nearest inch.

D. METHODOLOGY

Greenhouse Gas Emissions

New York City determined that consideration of GHG emissions is appropriate under CEQR for certain projects for several reasons: (a) GHG emission levels may be directly affected by a project's effect on energy use; (b) the U.S. Supreme Court has upheld the determination that CO_2, one of the main greenhouse gases, is an air pollutant, subject to regulation as defined by the Clean Air Act (CAA); and (c) Local Law 22 of 2008 codified PlaNYC's citywide GHG emissions reduction goal of 30 percent below 2005 levels by 2030. Moreover, the City has also adopted a longer-term goal of reducing emissions to 80 percent below 2005 levels by 2050, and has published a study evaluating the potential for achieving that goal. In accordance with the *CEQR Technical Manual*, the GHG consistency assessment focuses on proposed projects that would result in

development of 350,000 sf or greater and other energy-intense projects. As previously stated, the RWCDS for the proposed action exceeds 350,000 sf.

A project's GHG emissions can generally be assessed in two steps: the first would be to estimate the GHG emissions resulting from the proposed project, and the second would be to examine the proposed project in terms of the qualitative goals for reducing GHG emissions, as defined in the *CEQR Technical Manual*. A project's emissions are estimated with respect to the following main emissions sources: on-site operational emissions (direct and indirect); mobile source emissions (direct and indirect); and, when applicable, construction emissions and emissions from solid waste management. After the emissions are estimated, the source of GHG emissions are examined in terms of goals for reducing GHG emissions using qualitative considerations. As defined in the *CEQR Technical Manual*, the qualitative goals that should be assessed, as relevant to the RWCDS/With-Action condition are: (1) pursuing transit-oriented development; (2) generating clean, renewable power; (3) constructing new resource- and energy-efficient buildings and/or improving the efficiency of existing buildings; and (4) encouraging sustainable transportation.

Building Operational Emissions

According to the *CEQR Technical Manual*, for projects such as the RWCDS/With-Action condition, where the applicant controls the project area and the likely energy source is known, annual GHG emissions should be estimated based on the project's energy consumption and applying a GHG emissions (CO_2e) conversion factor. Table 18-4 of the *CEQR Technical Manual* provides the CO_2e conversion factors that were used to calculate potential annual operations emissions of the RWCDS/With-Action condition.

Mobile Source Emissions

The number of annual weekday vehicle trips by mode (cars, taxis, and trucks) that would be generated by the RWCDS/With-Action condition was calculated using the transportation planning assumptions developed for the traffic analysis and presented in Chapter 12, "Transportation." The assumptions used in the calculation include average daily weekday and Saturday person trips and delivery trips by use, the percentage of vehicle trips by mode, and the average vehicle occupancy. To calculate annual totals, the number of trips on Sundays was assumed to be the same as on Saturdays. Average one-way trip distances as shown in Tables 18-6 and 18-7 of the CEQR Technical Manual were used in the calculations of annual vehicle miles (VMTs) traveled by cars and taxis. The average truck trip was assumed to be 38 miles as per the *CEQR Technical Manual*. Table 18-8 of the *CEQR Technical Manual* was used to determine the percentage of VMTs by road type.

The projected annual VMTs for the RWCDS/With-Action condition, forming the basis for the GHG emissions calculations from mobile sources, are summarized in Table 14-3. The mobile GHG emissions calculator was used to obtain an estimate of car, taxi, and truck GHG emissions attributable to the RWCDS/With-Action condition, which is presented in the following section.

Table 14-3, RWCDS/Future With-Action Condition Annual Vehicle Miles Traveled (VMT/year)

Use	Passenger Vehicles	Taxis	Trucks	Total
Residential	3,703,472	0	775,236	4,478,708
Local Retail	381,428	150,366	239,970	771,764
Total Increase in VMT	***4,084,900***	***150,366***	***1,015,206***	***5,250,472***

Construction Emissions

A description of construction activities associated with the RWCDS/With-Action condition is provided in Chapter 18, "Construction." Consistent with common CEQR practice, emissions associated with construction under the reasonable worst-case development scenario (RWCDS) have not been estimated explicitly for the RWCDS/Future With-Action condition, but analyses prepared for development projects in New York City have shown that construction emissions (both direct and emissions embedded in the production of materials, including on-site construction equipment, delivery trucks, and upstream emissions from the production of steel, rebar, aluminum, and cement used for construction) would be equivalent to the total operational emissions from the operation of the building(s) over approximately five to ten years. As the annual operational emissions would be 8,478 metric tons of CO_2e, five years of operational emissions would be approximately 42,389 metric tons of CO_2e and 10 years of operational emissions would be approximately 84,778. It should also be noted that, as presented in Chapter 18, construction of the RWCDS/With-Action condition would be required to adhere to City regulations pertaining to diesel emissions of construction equipment.

Emissions from Solid Waste Management

The RWCDS/With-Action condition would not change the City's solid waste management system. Therefore, pursuant to *CEQR Technical Manual* guidelines, GHG emissions from solid waste generation, transportation, treatment, and disposal are not quantified.

Climate Change

Although significant climate change impacts are unlikely to occur in the analysis year for most projects, depending on a project's sensitivity, location, and useful life, it may be appropriate to provide a qualitative discussion of the potential effects on climate change on a proposed project as part of the environmental review. The *CEQR Technical Manual* recommends that such a discussion should focus on early integration of climate change considerations into the project and may include proposals to increase climate resilience and adaptive management strategies to allow for uncertainties in environmental considerations resulting from climate change.

Pursuant to CEQR, rising sea levels and increases in storm surge and coastal flooding are the most immediate threats in New York City for which site-specific conditions can be assessed. As stated in the *CEQR Technical Manual*, for site-specific development plans, an analysis of consistency with Policy 6.2 of the WRP may provide sufficient information to assess the potential effects of sea level rise, storm surge, and coastal sea flooding. As such, an analysis of Policy 6.2 of the WRP is provided in this chapter, consistent with the analysis provided for the WRP Consistency Assessment provided in Chapter 2, "Land Use, Zoning, and Public Policy."

E. GHG EMISSIONS

Operational Emissions

Table 14-4 displays the estimated GHG emissions associated with the operation emissions of the RWCDS/With-Action condition. Based on the expected use of natural gas as the energy source and the estimated annual energy consumption of 159,368.25 MMBTU (refer to Chapter 11, "Energy"), operational GHG emissions are estimated to be approximately 8,478 metric tons of CO_2e. This represents less than 0.02 percent of the City's overall 2014 GHG emissions of approximately 49.09 million metric tons. It should be noted that the estimated GHG emissions for the RWCDS/With-Action condition conservatively do not account for any energy efficiency measures that may be implemented beyond what is required by the NYC Energy Code, although such measures could be used and have the potential to reduce both ongoing energy costs and GHG emissions.

Table 14-4, Annual Operational Emissions

Energy Source	RWCDS MMBTU Annual Energy Consumption	CO_2e Conversion Factor (kg/MMBTU)	CO_2e Emissions (kg)	CO_2e Emissions (metric tons)
Natural Gas	159,368.25	53.196	8,477,753	8,478

Notes: 1 Metric Ton = 1,000 kg.

Mobile Source Emissions

The number of annual weekday motorized vehicle trips by mode (cars, taxis, and trucks) that would be generated by the RWCDS/With-Action condition was calculated using the transportation planning assumptions developed for the traffic analysis and presented in Chapter 12. The assumptions used in the calculation include average daily weekday and Saturday person trips and delivery trips by proposed use, the percentage of vehicle trips by mode, and the average vehicle occupancy. To calculate annual totals, the number of trips on Sundays was assumed to be the same as on Saturdays. As stated in Section D, "Methodology," above, annual VMTs by cars, taxis, and trucks were calculated in accordance with *CEQR Technical Manual* guidelines. As presented in Table 14-3, above, it is estimated that the incremental vehicle trips would travel a total of 5,250,472 miles annually; annual passenger vehicle miles would total 4,084,900, annual taxi vehicle miles would total 150,366, and annual truck trip miles would total 1,015,206. The mobile GHG emissions calculator was used to obtain an estimate of car, taxi, and truck GHG emissions attributable to the RWCDS/With-Action condition. As shown Table 14-5, annual incremental mobile source emissions would result in approximately 3,364.10 metric tons of CO_2e.

Table 14-5, Annual Mobile Source Emissions

Carbon Dioxide Equivalent (CO_2e) Emissions (metric tons/year)				
Road type	**Passenger Vehicles**	**Taxis**	**Trucks**	**Total**
Local	465.08	15.37	428.94	909.40
Arterial	745.58	24.56	708.23	1,478.37
Interstate/Expressway	500.87	16.22	459.25	976.34
Total	***1,711.53***	***56.16***	***1,596.42***	***3,364.10***

Summary

The total projected GHG emissions from the RWCDS/With-Action condition are summarized in Table 14-6, below. The estimated total of 11,842 metric tons of GHG emissions is less than 0.03 percent of New York City's 2014 annual total of 49.09 million metric tons. As described in Section D, "Methodology," above, in accordance with *CEQR Technical Manual* guidelines construction emissions were not modeled explicitly, but are estimated to be equivalent to approximately five to ten years of operational emissions, including both direct energy and emissions embedded in materials (extraction, production, and transport). The RWCDS/With-Action condition is not expected to change the City's solid waste management system, and, therefore, emissions associated with solid waste are not presented.

Table 14-6, Summary of Total Annual GHG Emissions

Emissions Source	CO_2e Emissions (metric tons)
Operations	8,478
Mobile Sources	3,364
Total	**11,842**

Consistency with GHG Reduction Goal

According to the *CEQR Technical Manual*, the assessment of consistency with the City GHG reduction goal should answer the following question: "Is the project consistent with the goal of reducing GHG emissions, specifically the attainment of the City's established GHG reduction goal of reducing citywide GHG emissions by 30 percent below 2005 levels by 2030?" To determine consistency with the City's overall GHG reduction goal, one is to assess consistency with the four major goals as cited in the *CEQR Technical Manual*, as relevant to the project:

* Pursue transit-oriented development;

* Generate clean renewable power through replacement of inefficient power plants with state-of-the-art technology and expanding the use of clean distributed generation (not applicable in the case of this application);

* Construct new resource- and energy-efficient buildings (including the use of sustainable construction materials and practices) and improve the efficiency of existing buildings; and

* Encourage sustainable transportation through improving public transit, improving the efficiency of private vehicles, and decreasing the carbon intensity of fuels.

The proposed action shows consistency with these goals in that:

* The project area is well-served by several transit options available in its immediate vicinity, including the Flushing Avenue subway station served by the G line, the Lorimer Street subway station served by the J and M lines, and the B43, B44, B46, B48, and B57 bus routes. In addition, the project site is located in proximity to several designated bicycle routes, including Class II lanes on Harrison Avenue and Wallabout Street (east of Harrison Avenue).

* The RWCDS/With-Action condition would utilize existing urban infrastructure and would facilitate the development of a vacant (apart from temporary interim uses) brownfield site.

* The action-generated buildings would be subject to the New York City Energy Conservation Code (NYCECC), which comprises the 2010 Energy Conservation Construction Codes of New York State (ECCCNYS) in addition to a series of local laws. The NYCECC governs performance requirements of heating, ventilation, and air conditioning (HVAC) systems, as well as the exterior building envelope of new buildings. In compliance with this code, the proposed action would need to meet standards for energy efficiency.

* The RWCDS/With-Action condition would not substantially involve energy-intensive uses such as data centers or web hosting facilities, nor would it remove a source of energy generation. For these reasons, it would not result in a significant adverse impact on energy systems.

F. CLIMATE CHANGE

As described in Chapter 1, "Project Description," per the Preliminary Flood Insurance Rate Maps (FIRM) for New York City dated 1/30/2015, which are issued by the Federal Emergency Management Agency (FEMA) and considered the best available flood hazard data, the project area is partly within a designated "shaded X" zone on the Federal Emergency Management Agency (FEMA) 2015 Preliminary Flood Insurance Rate Map (FIRM), indicating an area of moderate to low-risk flood hazard with an annual probability of flooding of 0.2 percent to 1 percent, usually defined as the area between the limits of the 100-year and 500-year floods. The portion of the project area outside the shaded X zone is located above the 500-year floodplain and considered an area of minimum flood hazard.

Since the RWCDS/With-Action condition buildings would be constructed and operated within a 500-year coastal floodplain, the potential effects of global climate change have been considered. As stated in the *CEQR Technical Manual*, an analysis of consistency with Policy 6.2 of the WRP may provide sufficient information to assess the potential effects of sea level rise, storm surge, and

coastal sea flooding. Policy 6.2 of the WRP states that consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) should be integrated into the planning and design of projects in the City's Coastal Zone.

WRP Policy 6.2 requires waterfront developments reviewed under CEQR to:

* Consider potential risks related to coastal flooding to features specific to the project, including, but not limited to, critical electrical and mechanical systems, residential living areas, and public access areas;

* Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and site, the use of the property to be protected, and the surrounding area;

* Integrate consideration of the latest New York City projections of climate change and sea level rise into the planning and design of projects in the City's Coastal Zone;

* Incorporate design techniques in projects that address the potential risks identified and/or that enhance the capacity to incorporate adaptive techniques in the future. Climate resilience techniques should aim to protect lives, minimize damage to systems and natural resources, prevent loss of property, and, if practical, promote economic growth and provide additional benefits, such as provision of public space and intertidal habitat;

* Provide a qualitative analysis of potential adverse impacts on existing resources (including ecological systems, public access, visual quality, water-dependent uses, infrastructure, and adjacent properties) as a result of the anticipated effects of climate change;

* Projects that involve construction of new structures directly in the water or at the water line should be designed to protect inland structures and uses from flooding and storm surge when appropriate and practicable;

* As appropriate and to the extent practicable:

    - Promote the greening of the waterfront with a variety of plant material for aesthetic and ecological benefit;
    - Use water- and salt-tolerant plantings in areas subject to flooding and salt spray;
    - Maximize water-absorption functions of planted areas;
    - Preserve and enhance natural shoreline edges;
    - Design shoreline edges that foster a rich marine habitat; and
    - Design sites that anticipate the effects of climate change, such as sea level rise and storm surges.

As presented in Chapter 2, "Land Use, Zoning, and Public Policy," the proposed action would support Policy 6.2 of the WRP.

Should the base flood elevation (BFE) rise in the future, the perimeter of the project site buildings could be retrofitted with flood prevention systems (either temporary or permanently installed flood gates/shutters), potentially in conjunction with an emergency flood protection plan. The nature of such retrofits would depend on the specific change to the BFE, possible future changes to Building Code flood regulations, City-led infrastructure measures to address such changes, and other considerations that are unknown as this time. As such, the nature of such retrofits cannot be characterized at this time.

It should also be noted that coastal floodplains are influenced by astronomic tide and meteorological forces and not by fluvial (river) flooding, and, as such, are not affected by the placement of obstructions within the floodplain. Therefore, the construction and operation of the RWCDS/With-Action condition buildings would not exacerbate future projected flooding conditions.

For these reasons, the proposed action would not result in significant adverse climate change impacts.